

VF20 Flashlight & 720P Camera

STATEMENT

Thank you for purchasing **Video Flashlight VF20**. Please read this user manual carefully before any operation. If the user manual cannot help you to solve certain problems, please ask your retailer for help or email us: sales@amo-tech.cn



INTRODUCTION

General introduction

The AMO video flashlight is a rugged and revolutionary security, outdoor sports and industrial image capturing device. Equipped with a wide-angle camera lens and USA made high lumen LED, it combines **Light-Strobe-SOS-Video-Camera-Laser all in one**; It supports underwater operation over 10m thanks to its IP68 waterproof level and durable aircraft-grade aluminum construction.

Features

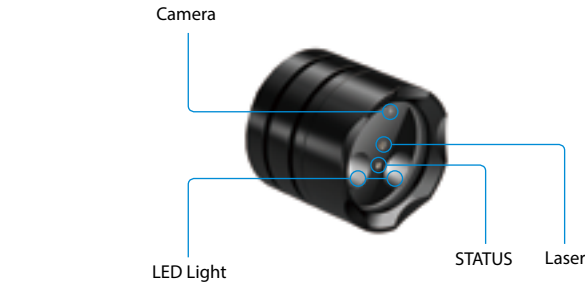
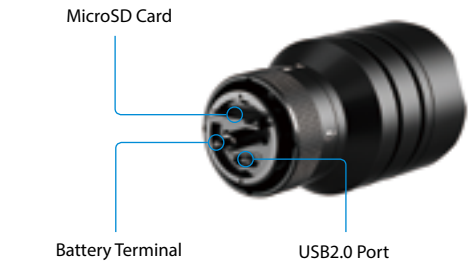
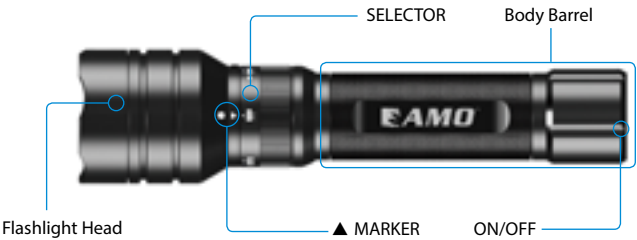
- Video HD Camera
- Photo MP Camera
- Strobe & SOS mode for warnings and help
- Record video/take photo while lighting
- Industry-standard 18650 rechargeable battery (replaceable), low-voltage protection
- IP68 waterproof level, double O-rings, underwater operation
- 178mm (Length)×43mm (Head diameter)×30.5mm (body diameter), compact and pocketable
- Made of durable aircraft-grade aluminum

Specifications

LED Light	Type	Cree XPG-2
	Number	2*LED Lights
	Lumen	80-180 Lum
Battery	Type	18650 lithium battery
	Capacity	2600mAh/3.7V
Video	Compression	MJPEG
	Resolution	1280x720/848 x480 /640x480
	Format	AVI
Photo	Resolution	1 Megapixel
	Format	JPEG
Recording Frame Rate	1280x720(30 fps)	

Storage	Supports Max. 32G Micro SD Card (Not included)
PC interface	USB 2.0
Laser Location	Supports
Support functions	Light, take photo, record video, laser positioning
Microphone	Without
Lighting modes	High-beam, Low-beam, SOS, Strobe
	Only flashlight working time: 5.2-9.4 hours
	Only video working time: 13.7 hours
Working Time	Flashlight and video working time: 4.2-6.6 hours
Dimension Temperature	0°C -50°C
Microphone	178mm (Body Length), 43mm (Head Diameter), 30.5mm(body diameter)

Product Structure



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Features

	Dual Cree™ XPG-2 LED Light
	Battery Saving Low Beam(8 hrs)
	Emergency Flashing Strobe
	Automatic SOS Rescue Signal
	720P Colour Video Camera
	1MP Colour Photo Camera
	LASER Pointer

OPERATION

Quick Start Guide (Switch off first)

1. Remove the **Rechargeable Battery** by unscrewing the **Body Barrel**.
2. Ensure that the **Rechargeable Battery** is charged, see method ④ .
3. Unscrew the **Flashlight Head** and fit the **Micro SD Card**, see ⑤ .
4. If accurate image **Timestamps** are required, reset the time, see ⑥ .
5. Fit the **Flashlight Head** ensuring that the waterproof seal is well threaded.
6. Fir the **Rechargeable Battery** (**Red+** forward). Tighten the **Body Barrel**.
7. Press the **ON/OFF** button to **ON**.
8. Rotate the **SELECTOR** to Light or low-beam for Light modes, see ① .
9. Rotate the **SELECTOR** to strobe or *sos* for pulse signaling, see ② .
10. Rotate the **SELECTOR** to video or photo for image capture, see ③ .
11. Rotate the **SELECTOR** in-between any mode for **STANDBY** Mode.
12. Be mindful of the **STATUS LED** as a device-health reporting function, see ⑦ .
13. Press the **ON/OFF** button to switch **OFF**.
14. Repeat from Step 7. above for normal field operation.

Operational Modes

① Light Modes

1. Use light mode for full brightness.
2. Use low-beam for general endurance operation (longer battery life) .

3. Set < **MARKER**> in-between any mode for **STANDBY** Mode.
4. Turn OFF (ON/OFF button) when not in use (for longer shelf-life) .

② Pulsed Signaling Modes

1. Use strobe mode for alarms or warnings (roadside breakdown) .
2. Use automatic *sos* mode to call for help or (mountain or sea) .

③ Image Capture Modes

1. See **JOG METHOD** ⑩ for video or photo lighting features.
2. Use video mode for full color .AVI video at 1280*720, 30 FPS. (Uses~1MB/sec so a 16GB MicroSD Card holds~4.5 Hours of Video) .
3. Use photo mode for full color 1280*720 .JPG image, 1 per second. (~100KB/image so a 16GB MicroSD Card holds ~150 thousands photos) .
4. Keep the < **MARKER**>at the top or the images will be skew upside down.

Setup and Preparation

④ Battery Test and Charge

1. Recharge when the **STATUS LED** slow-pulse **GREEN** ⑦ .
If possible, measure the Rechargeable Battery voltage with a volt meter. A value near or above 4.0V is full while a value below 3.5V requires a recharge.
2. Insert into the **Charger** by sliding the spring (put **Red+** at the LED end) .
3. Plug **Charger** into an OFF AC outlet (with Adapter) and switch AC ON.
4. The **Charger** LED is **Green blink** for busy charging and Green for charged. The charger is on a timed cycle and takes 8 hours. **Do NOT “topup”** charge.

⑤ MicroSD Card Management

1. For best image capture results ③ , pre-format the MicroSD Card (8GB, 16GB or 32GB) in a PC, Laptop or Mobile Phone.

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2. If accurate image Timestamps are required, do ⑥ first
Insert (do not force) the MicroSD card into the **MicroSD Slot**-gold contacts inwards & down towards the gold pin-until it clicks in place. Reassemble device.
3. Use the Video Flashlight for image capture. Thereafter, set the<▲**MARKER**> to "in-between" mode and then turn OFF the device by pressing **ON/OFF**.
4. Unscrew the **Flashlight Head** and fit **USB Cable** into the USB 2.0 Port.
5. Connect the USB cable end into a PC or Laptop. No drivers are required but allow the computer to initiate the device as a FLASH Drive.
6. In DCIM, browse the Video (VID_yyyymmdd_hhmmss.avi and the Photos (PIC_yyyymmdd_hhmmss.jpg). Copy, move or delete the files.
7. Alternatively, mount the MicroSD Card into a Smartphone and browse.

⑥ Setting the Image Timestamp

1. The device date-time is embedded in all images and filenames.
2. Each time the unit is switched OFF for extended periods, this time is lost.
3. Use a PC/Laptop or Smartphone to read the file \time.txt on the MicroSD.
4. Update & save the date-time values with a text editor **preserving the format yyyy.mm.dd hh:mm:ss** but set the time ahead by a minute.
5. Reassemble the device and then at precisely the pre-set time, turn it ON.

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Advanced Modes

⑦ Status LED

1. The **STATUS LED** is either **RED**, **AMBER** or **Green** like a traffic light.
2. When in normal operation, the **STATUS LED** is **GREEN** for OK and a slow pulsing **RED** for ERROR (device error, self-test fail or flat battery) .
3. When in Image Capture mode (video 📹 or photo 📷), a **FAST FLASH** between **GREEN** and **RED** means MicroSD card full/error or not found.
4. In video 📹 mode, a slow equal pulse between **GREEN** & **AMBER** means busy recording a video. To stop video recording, first set the **SELECTOR** to **STANDBY**, then only press **ON/OFF** or errors may occur.
5. Note that video 📹 & photo 📷 have a startup delay for file preparation.

⑧ JOG Method

1. Video 📹 , photo 📷 and *sos* modes have additional configurations. The **JOG** method is used to set these configurations and the device stores and remembers there setting for future operations.
2. The "**JOG** method" is to twist the **SELECTOR** *SLIGHTLY* off the chosen mode and to quickly return it to the same mode within one second. Either left or right twists can be used but do **NOT** enter the **STANDBY** zone .

⑨ SOS JOG Function

The **STATUS LED** reports back the health status of the device. To toggle this LED Off or On, use the **JOG** method in the *sos* mode. Turning the STATUS LED off allows for“spy” image capture but shows no status.

⑩ Video or Photo JOG Function

1. Video 📹 or photo 📷 modes can be used with or without the **LIGHT**, **LOW-BEAM** or **LASER** in any combination by means of the **JOG** method.
2. **SIX** settings are available in sequence. The **LASER** is useful for pointing the camera to the item to be image captured. **Do NOT point at eyes**.
3. Video 📹 & photo 📷 settings are different and are stored separately.

SIX Combination Settings

	High-beam	Low-beam	Laser
Video			
	√		
		√	
			√
	√		√
Photo		√	√
		√	
	√		√
		√	√

APPLICATION

Date-time stamped video & photo provide evidence for Police, Military, Law Enforcement, Firefighters, Rescuers, Engineers, etc.

Film & Timestamp suspicions events on guard patrol

Record inspection routes in caves or underwater

Ideal for emergencies on Land, Sea and Air; eg:

Armed response

Security incidents

Staff unrest

Staff (re)training

Cleaning services (before and after)

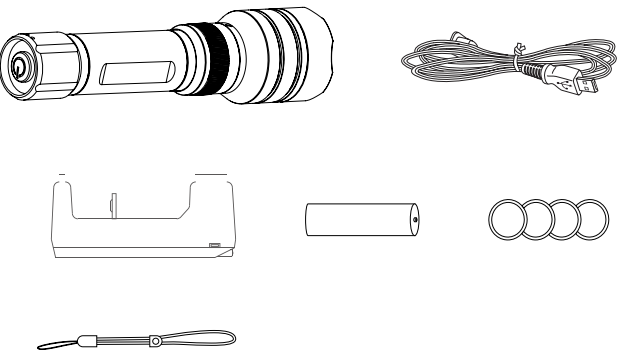
Repair team sign-off

OHS inspections

Proof of service levels

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PACKLING LIST



- 1×Video Flashlight
- 1×USB Cable
- 1×18650 USB Charger
- 1×18650 Lithium Battery
- 2 Sets Spare O-Rings
- 1×Safety Strap